

REMARKS

The Applicants respectfully request reconsideration of this application in view of the above amendments and the following remarks.

35 U.S.C. § 101 Rejection

The Examiner has rejected claims 21-28 under 35 U.S.C. § 101.

Applicants respectfully submit that claims 21-28 are statutory under 35 U.S.C. § 101. Firstly, claim 21 is limited to a practical application. Namely, claim 21 is limited to the practical application of pausing processing of instructions **using an instruction**. Secondly, the pausing and resuming of the processing of instructions recited in claim 21 is believed to be **a useful, concrete, and tangible result**. Thirdly, it is to be understood that claim 21 is a method performed in an apparatus having **specific circuitry or specific hardware** to process the instruction. Accordingly, for at least one or more of these reasons, claim 21 is believed to be statutory.

Claim 26 is believed to be statutory for one or more similar reasons.

35 U.S.C. §102(e) Rejection - Emer

The Examiner has rejected claims 21-25 and 29-33 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,493,741 issued to Emer et al. (hereinafter "Emer"). The Applicants respectfully submit that the present claims are allowable over Emer.

Claim 21 pertains to a method comprising:

*“determining whether an instruction for a first thread is an instruction of a first type;
pausing processing of instructions of the first thread upon determining that the instruction is of the first type while processing instructions from a second thread; and*

resuming processing of a second microinstruction decoded from the instruction after execution of a first microinstruction decoded from the instruction”.

Emer does not disclose these limitations. In particular, Emer does not disclose resuming processing of a second microinstruction decoded from the instruction after execution of a first microinstruction decoded from the instruction.

Accordingly, claim 21 and its dependent claims are believed to be allowable over Emer.

Independent claims 29 and its dependent claims are believed to be allowable for similar reasons.

35 U.S.C. §103(a) Rejection - Emer

The Examiner has rejected claims 26-28 and 34-36 under 35 U.S.C. §103(a) as being unpatentable over Emer. The Applicants respectfully submit that the present claims are allowable over Emer.

Claim 26 pertains to a method comprising:

*“determining whether an instruction of a first thread is of a first type;
initiating a counter upon determining that the instruction is of the first type, wherein the instruction includes an operand and the initiating includes loading the counter with the operand;
and
pausing processing of instructions of the first thread until the counter reaches the value while processing instructions of a second thread at the pipeline stage”.*

Emer does not disclose or render obvious these limitations. In particular, Emer does not disclose render obvious that the instruction includes an operand and the initiating includes loading the counter with the operand.

Accordingly, claim 26 and its dependent claims are believed to be allowable over Emer.

Independent claims 34 and its dependent claims are believed to be allowable for similar reasons.

Conclusion

In view of the foregoing, it is believed that all claims now pending patentably define the subject invention over the prior art of record and are in condition for allowance. Applicants respectfully request that the rejections be withdrawn and the claims be allowed at the earliest possible date.

Request For Telephone Interview

The Examiner is invited to call Brent E. Vecchia at (303) 740-1980 if there remains any issue with allowance of the case.

Request For An Extension Of Time

The Applicants respectfully petition for an extension of time to respond to the outstanding Office Action pursuant to 37 C.F.R. § 1.136(a) should one be necessary. Please charge our Deposit Account No. 02-2666 to cover the necessary fee under 37 C.F.R. § 1.17 for such an extension.

Charge Our Deposit Account

Please charge any shortage to our Deposit Account No. 02-2666.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

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